

**WHAT IS CLAIMED IS**

1. A composition for use in treating or preventing mycoplasma infection in a subject suffering from a disorder selected from the group consisting of (i) a disorder characterized by increased cell proliferation and (ii) a disorder characterized by co-infection with mycoplasma and a second microbe, comprising an agent that prevents or inhibits sialic acid-mediated attachment of mycoplasma to cells of the subject.

2. The composition of claim 1, where the agent is an enzyme having an activity selected from the group consisting of neuraminidase activity, trans-sialidase activity, and a combination of neuraminidase and trans-sialidase activity.

3. The enzyme of claim 2, where the enzyme is derived from a *Trypanosoma cruzi* microorganism.

4. The enzyme of claim 3, where the enzyme is a native enzyme.

5. The enzyme of claim 3, where the enzyme is a recombinant enzyme.

6. The enzyme of claim 5, where the enzyme has an amino acid sequence as set forth in (SEQ ID NO:2).

7. The composition of claim 1, where the disorder is atherosclerotic vascular disease.

8. The composition of claim 1, where the disorder is a malignant disease.

9. The composition of claim 1, where the disorder is co-infection with a human immunodeficiency virus.

10. The composition of claim 1, where the disorder is co-infection with a chlamydia microbe.

11. The use of an agent that prevents or inhibits mycoplasma infection for the manufacture of a medicament for  
5 treating a disorder characterized by increase cell proliferation.

12. The use as in claim 11, wherein a vector containing the DNA insert as set forth in (SEQ ID NO: 1) is to produce the enzyme of the claim 6.

13. The composition of claim 11, where the disorder is  
10 atherosclerotic vascular disease.

14. The composition of claim 11, where the disorder is a malignant disease.

15. The composition of claim 12, where the agent is an antibiotic.